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(52) UK CL (Edition N ) E1D DCE2 DF124 D109 D2055 D2139

(56) Documents Cited

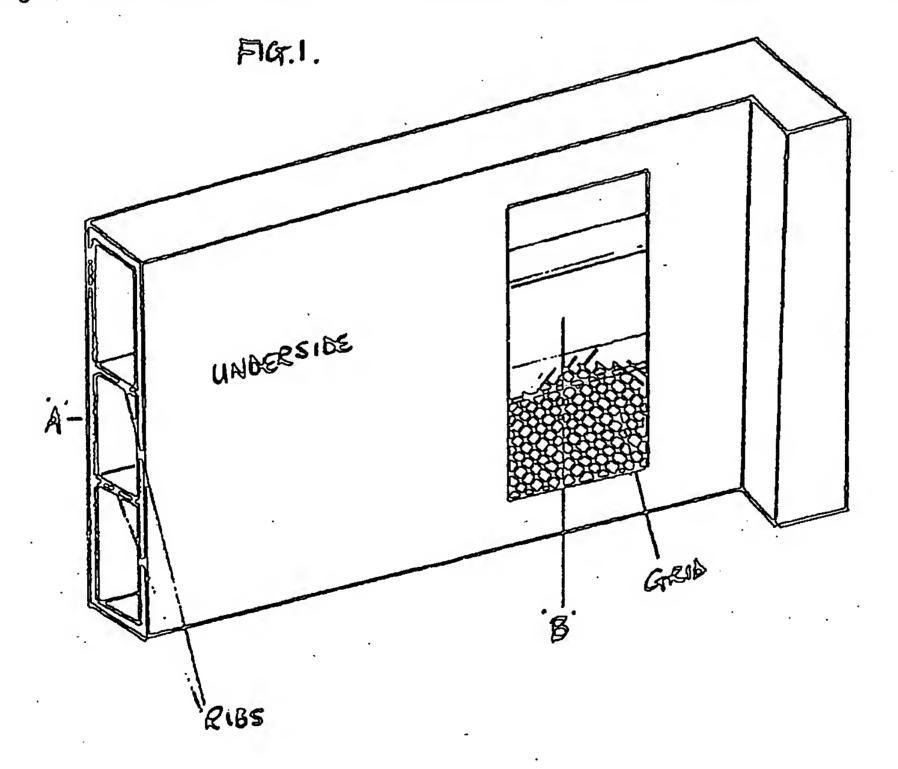
GB 2262295 A GB 2136473 A GB 1336505 A EP 0392064 A1

GB 2124266 A

(58) Field of Search
UK CL (Edition L ) E1D DF124
INT CL<sup>5</sup> E04D

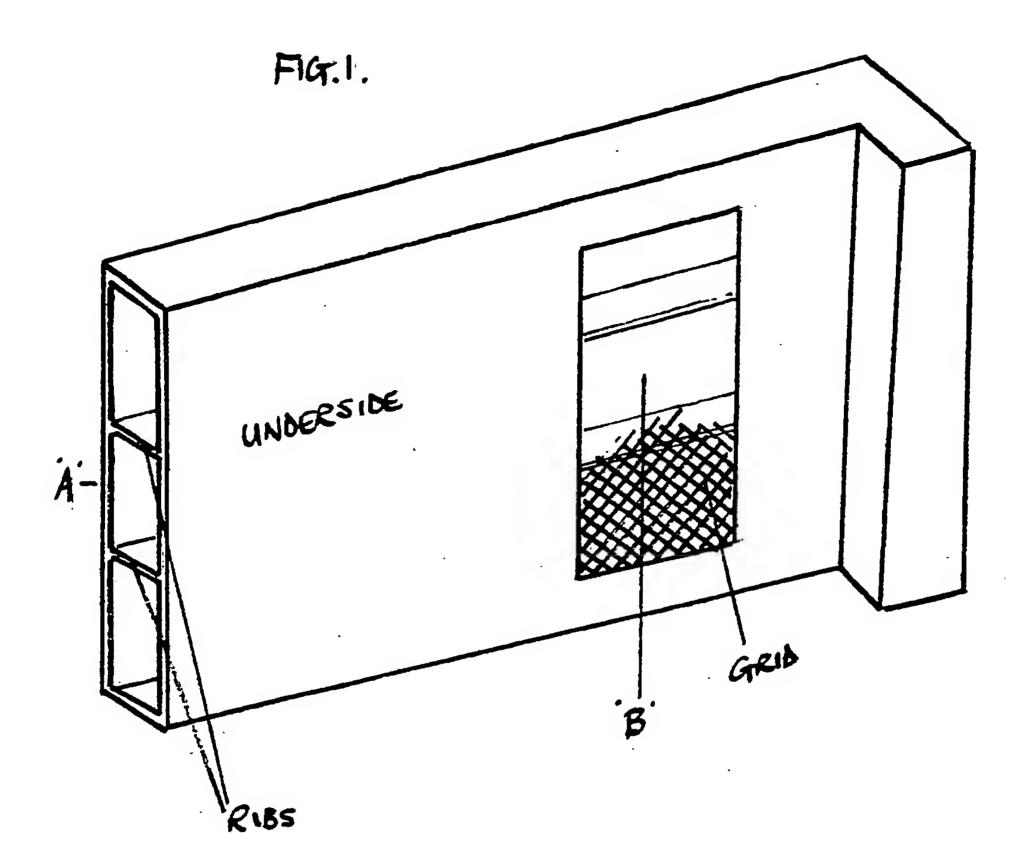
#### (54) Roof ventilating tile

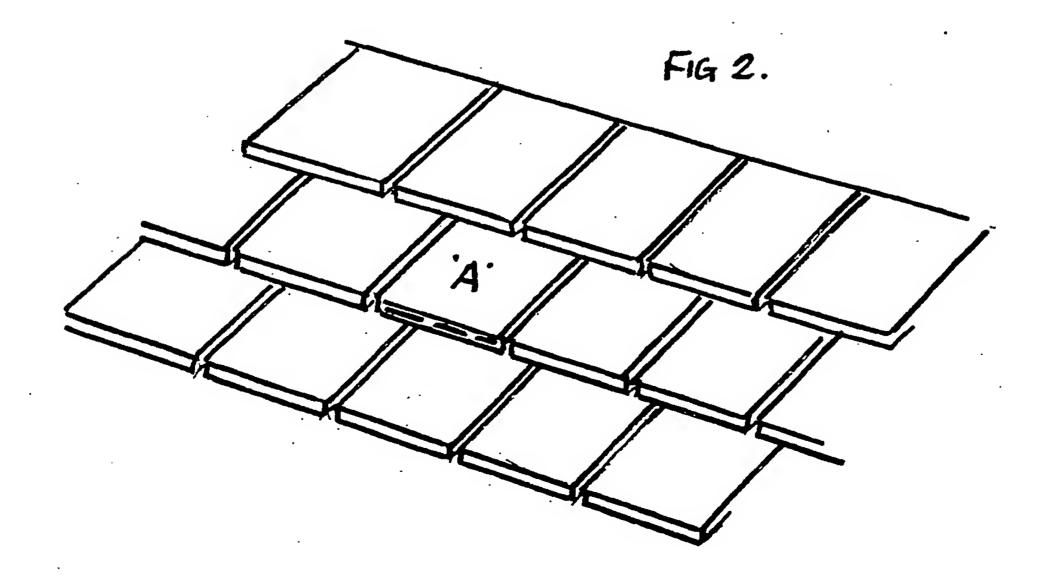
(57) A hollow roofing tile has a lower aperture B, with an insect screen, communicating with ducts leading to the lower edge (in use) of the tile, which is shaped externally identically with adjacent solid tiles.



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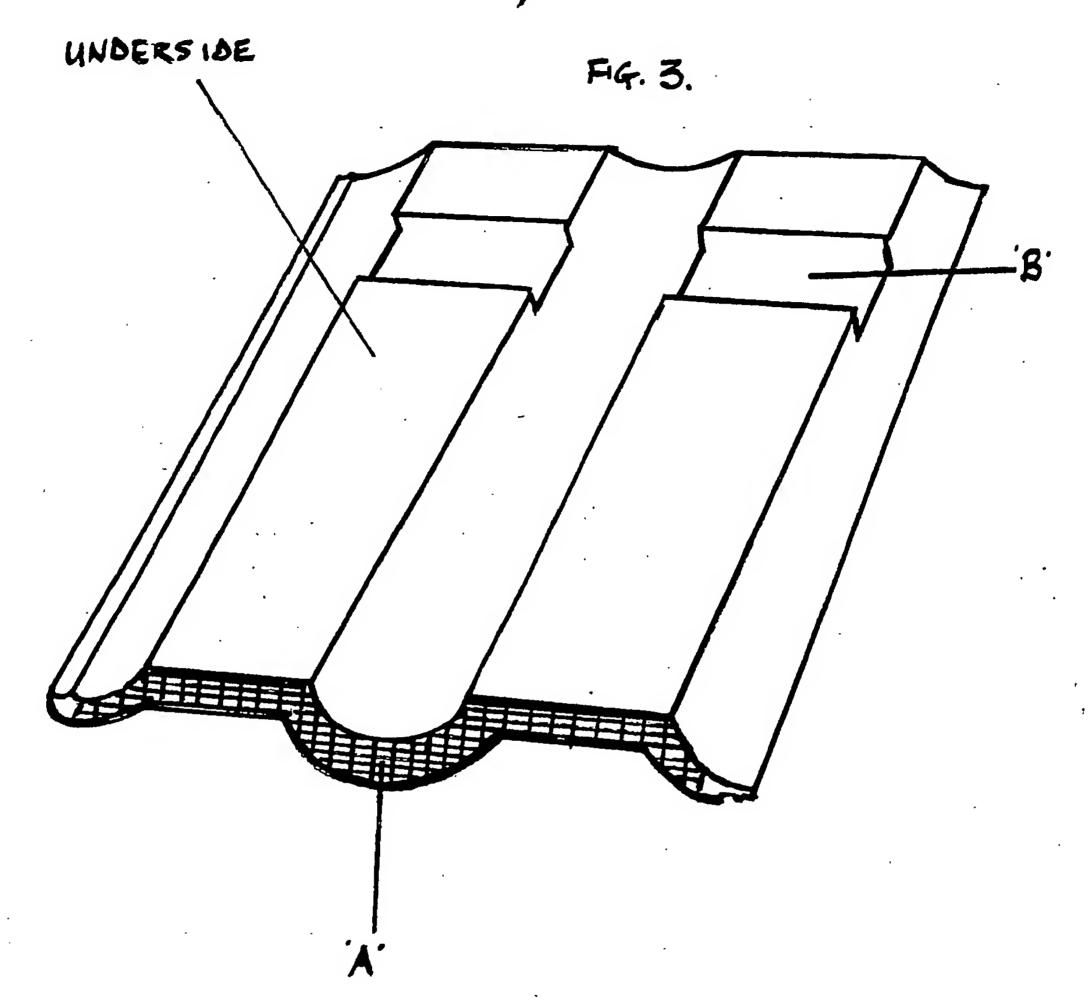
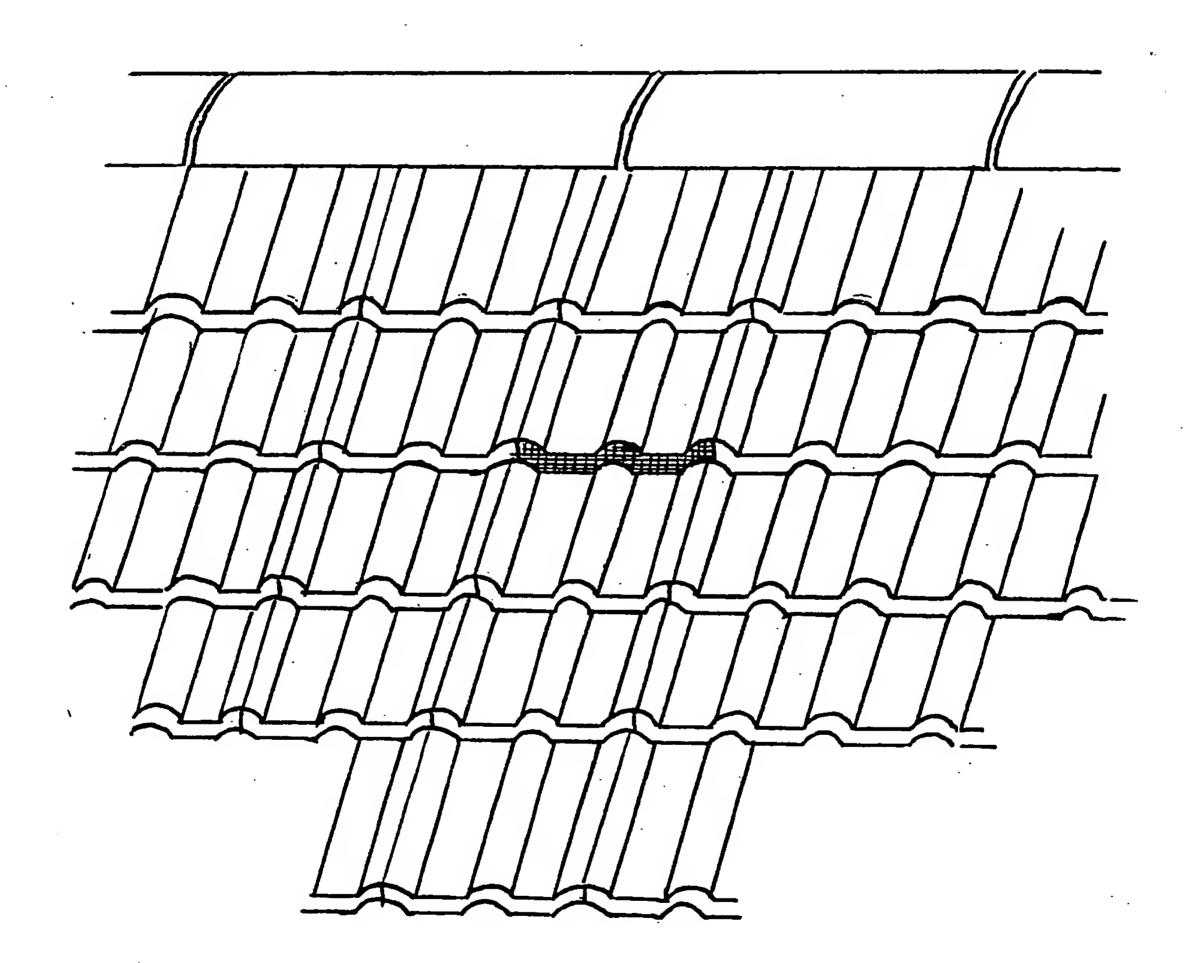




FIG. 4.



### CONFORMABLE AIR BREATHING ROOF TILE

This invention relates to an air breathing roof tile which conforms in profile to the solid roof tile with which it is intended to be used for the roofing of a building.

Building Regulations require the roof voids of new buildings to be ventilated. Existing roof tiles are of solid construction and when used over a complete roof do not allow the required ventilation. Consequently, special vents which interface with the solid tiles are used to meet the ventilation requirement. The exterior profiles of these vents do not conform to the exterior profiles of the solid tiles with which they are intended to be used, consequently the lines formed by the solid tiles of a roof are broken by these vents. According to the present invention, means are provided for air to flow through the body of a roof tile construction while maintaining tile exterior dimensions and profile in conformation with the corresponding solid tiles with which the hollow tile is intended to be used. The cavity within the hollow tile is open at one end face to the air external to the roof when installed and at the opposite end face or underside is open to the air within the roof void, thus allowing air to pass freely between roof void and the atmosphere external to the roof. The cavity of the hollow tile may have internal structural ribs. Built into the tile, or as an added insert, is a grid to keep out insects. The proportional area of roof covered by hollow tiles is unlimited excepting the minimum ventilation requirement.

Two specific embodiments of the invention are described by way of an example.

Figure 1. shows a pictorial view of an embodiment of the invention in a plain tile profile. When installed in a roof end, face 'A' is open to the exterior atmosphere while underside face 'B' is open to the roof void atmosphere. Two internal structural ribs are shown in this example and an "insect grid" is shown in the underside aperture. Figure 2. shows a section of roof with the follow plain tile 'A' installed within a surrounding area of solid plain tiles.

Figure 3. shows a pictorial view of an embodiment of the invention in an interlocking tile profile. When installed in a roof end face 'A' of the tile is open to the external atmospere while underside face 'B' is open to the roof void atmosphere. An example of the "insect grid" is shown in one of the end face apertures 'A'.

Figure 4. shows a section of roof with the hollow interlockings tile 'A' installed within a surrounding area of interlocking solid tiles.



#### CLAIMS

- A roofing tile of hollow construction which is compatable 1. in dimensions and profile with the corresponding solid tile.
- Apertures in the hollow tile which interface with the roof 2. void atmosphere and with the atmosphere external to the roof and allows air to flow freely between them.
- Ribs within the hollow tile where necessary for structural 3. reasons
- Built-in or added grids to keep insects out of the roof 4. void.

# Pr nts Act 1977 Examiner's report t the Comptr II runder Section 17 (The Search R port)

Application number

GB 9313434.4

Relevant Technical fields	Search Examiner
(i) UK CI (Edition L ) E1D (DF124)	
	D J LOVELL
(ii) Int CI (Edition <sup>5</sup> ) E04D	
Databases (see over)	Date of Search
(i) UK Patent Office	
/::\	16-9-93
(ii)	

Documents considered relevant following a search in respect of claims 1-4

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
Х, У	GB 2262295 A (UBBINK (UK) LTD) See tile 11	1-4
Х, У	GB 2136473 A (GRA-MAR BUILDING PRODUCTS LTD (UK))	4
X,Y	GB 2124266 A (CATNIC COMPONENTS)	4
Х,Ү	GB 1336505 (VEB LAUSITZER DACHZIEGFLWERKE)	1-4
Х, У	EP 0392064 A1 (AKT FUR KERAMISCHE IND LAUFEN)	1-4
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